# KLA12

Quick Start Guide

## Suspending the KLA12

**WARNING!:** Read and follow these instructions carefully. If the loudspeakers are not suspended properly, they could fall, causing personal injury and damage to the equipment.

### Rules for Suspension

- Consult a Professional Mechanical or Structural Engineer, licensed in the jurisdiction of the sound system installation, to review, verify, and approve all attachments to the building or structure.
- Employ the services of a Professional Rigger for hoisting, positioning, and attaching the equipment to the supporting structure.
- Correct use of all suspension hardware and components is imperative in sound system suspension and deployment.
- Always calculate suspended loads before lifting to make sure suspension components and hardware are used within their respective load limits.
- Consult local codes and regulations to fully understand the requirements for suspended loads in the venue in which you will suspend the equipment.
- Use only the KLA AF12 Array Frame or the M10 installation points for suspending the array.
- Be absolutely certain of the integrity of any structural member intended to support suspended loads. Hidden structural members can have hidden structural weakness.
- Never assume anything! Owner or third-party supplied suspension attachment points may not be adequate for suspending the loads.
- Before lifting, always inspect all components (enclosures, suspension brackets, pins, frames, bolts, nuts, slings, shackles, etc.) for cracks, wear, deformation, corrosion, missing, loose, or damaged parts that could reduce the strength of the assembly. Discard any worn, defective, or suspect parts and replace them with new appropriately load-rated parts.

### Shock Loading

When a load is either moved or stopped, its static weight is magnified. Sudden movements can magnify the static weight several times. This magnification of static weight is called "shock loading". Shock loading poses a danger to equipment and workers. The effects of shock loading can be instantaneous, or may remain undetected unless the equipment is visually damaged. Proper preparation for shock loading requires careful planning and knowledge of equipment, suspension, and lifting practices.

Shock loading of equipment and structures is usually confined to lifting and installation, but natural forces (winds, earthquakes, and so on) can impose shock loads several times the static load. Because of this, structures and suspension equipment must be capable of supporting several times the weight of the suspended equipment.

### KLA Working Load Limits

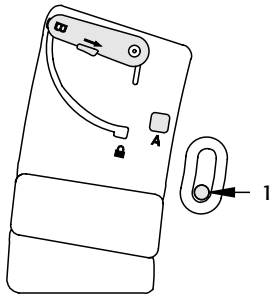
The KLA components are engineered for a 10:1 design factor.

Use the KLA AF12 Array Frame or the M10 Integrated Suspension points to suspend a single KLA Array consisting of a maximum of two KLA181, or five KLA12, or two KLA181 and five KLA12 loudspeakers. The weight of any single array shall not exceed 480 lbs. (218 kg).

TD-000334-00-A

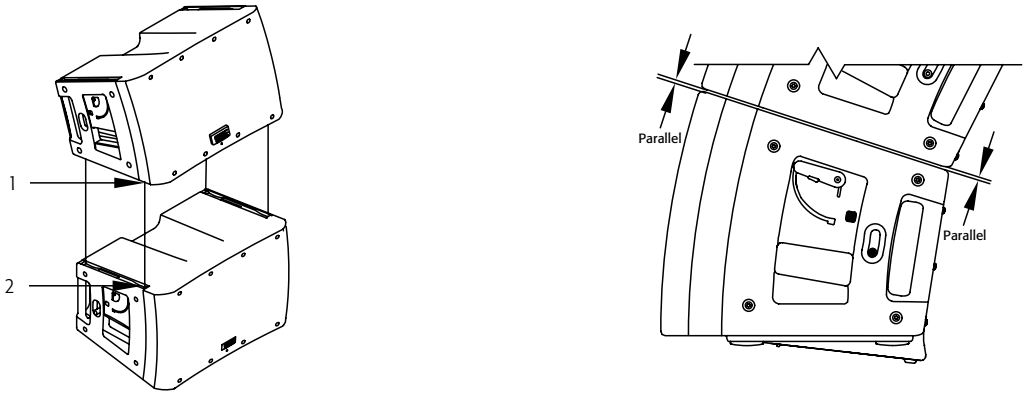
# Attaching KLA12 Loudspeakers Together.

**WARNING!:** A single KLA array can consist of a maximum of two KLA181, or five KLA12, or two KLA181 and five KLA12 loudspeakers. The weight of any single array shall not exceed 480 lbs. (218 kg).



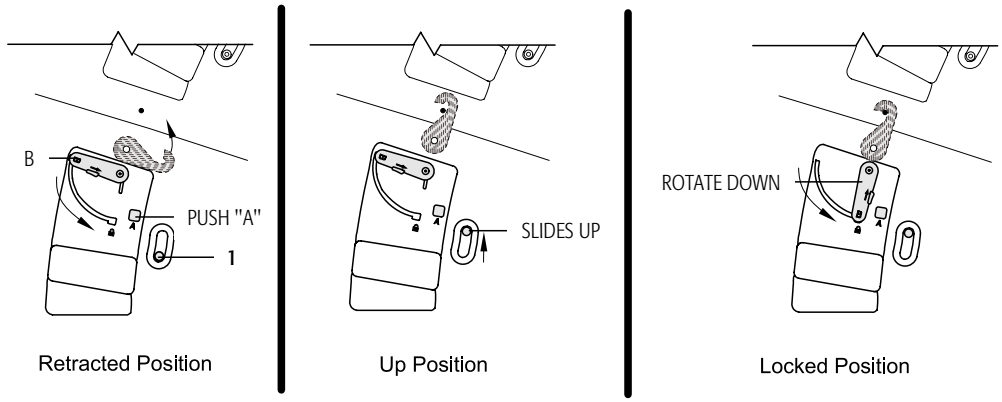

– Figure 1 –

1. Make sure that the levers labeled "**B**" are up, and slides (1) are down on both sides of the bottom loudspeaker (Figure 1).




– Figure 2 –

2. Place one KLA12 on top a KLA12. Nest the four feet (1) on the top unit into the feet receptacles (2) on the bottom unit (Figure 2). Make sure the surfaces are aligned and parallel. For more than a two-box KLA12 assembly, please see the KLA12 User Manual.




– Figure 3 –

3. On the bottom loudspeaker, push button "**A**". Slide (1) automatically moves to Up Position. Rotate lever "**B**" down to Locked Position.

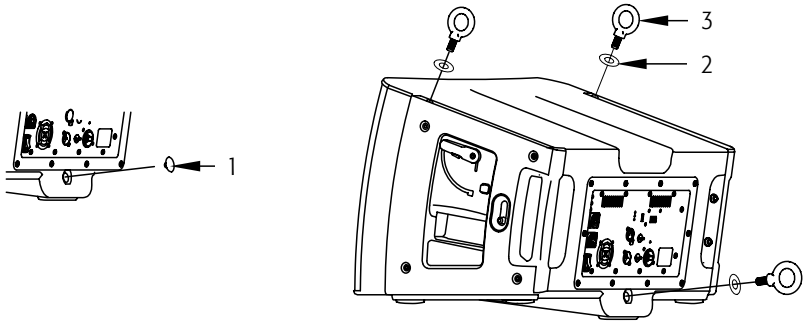
**WARNING!:** Make sure the loudspeakers are properly aligned.

**WARNING!:** Make sure the lever locks in the down, locked position. Lift array to confirm assembly.

# Install K Series M10 KIT in Integrated Suspension Points

The K Series M10 kit is sold separately and available from QSC Audio.

**WARNING!:** A single KLA array can consist of a maximum of two KLA181, or five KLA12, or two KLA181 and five KLA12 loudspeakers. The weight of any single array shall not exceed 480 lbs. (218 kg).

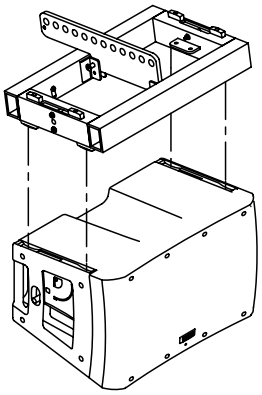



– Figure 4 –

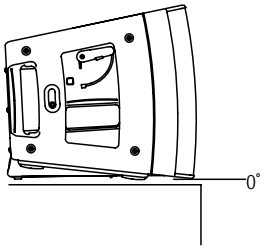
1. Remove the rubber plug Figure 4 (1).
2. Install three washers Figure 4 (2) and three eyebolts Figure 4 (3). Tighten until snug.
3. Continue to rotate the eyebolts until they reach the desired position. Do not overtighten.
4. Suspend the array from the suspension structure using an appropriate sling, cable, etc.

# Other KLA12 Deployment

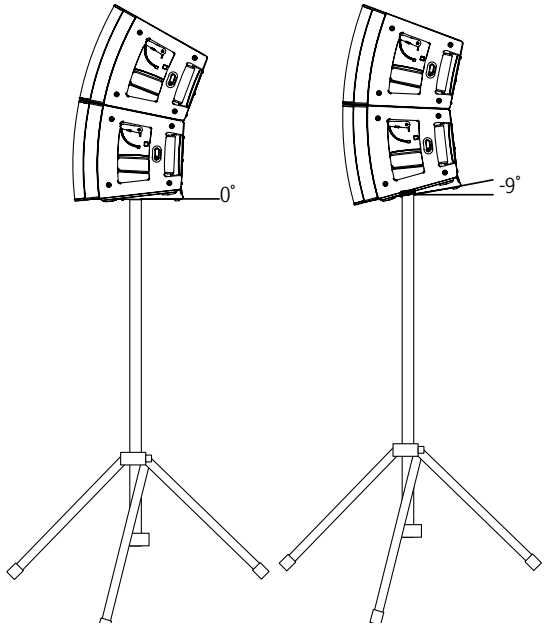
In addition to the M10 rigging listed above, you can use a KLA AF12 array frame to suspend an array (Figure 5), you can deploy a single KLA12 loudspeaker on stage for front fill or lip fill applications (Figure 6), you can pole-mount up to two KLA12s on a loudspeaker stand (Figure 7) or over a KLA181 or KW181 (Figure 8).



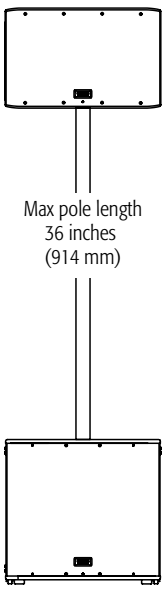
– Figure 5 –




– Figure 6 –

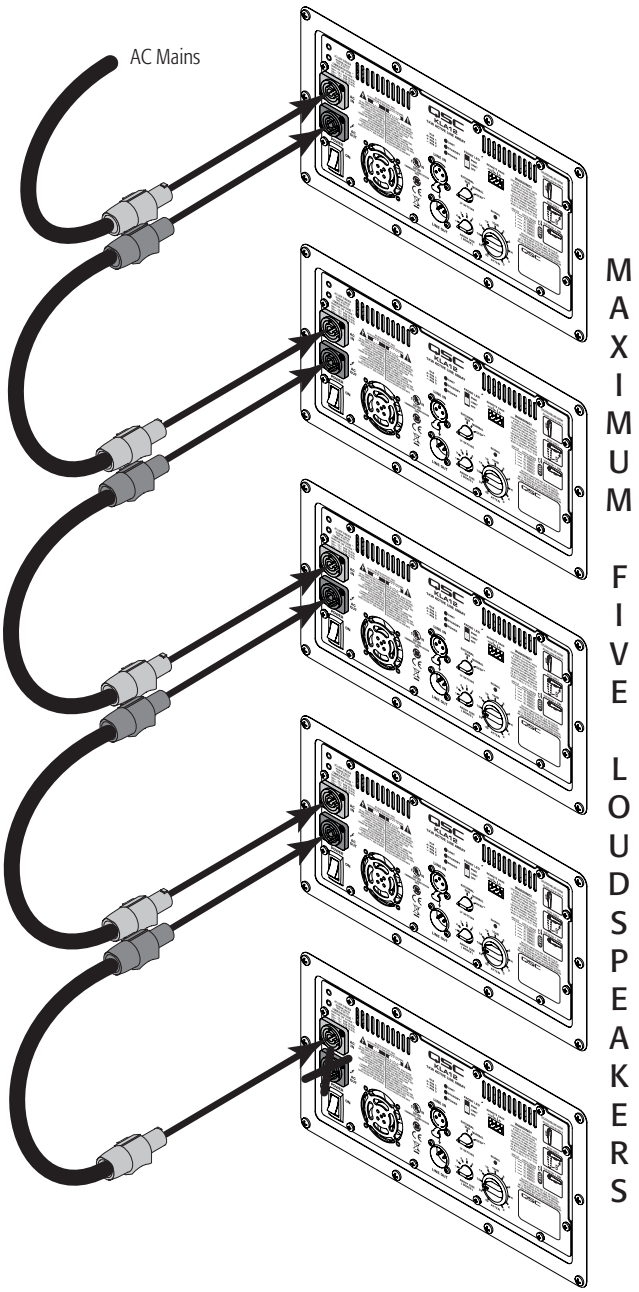



– Figure 7 –

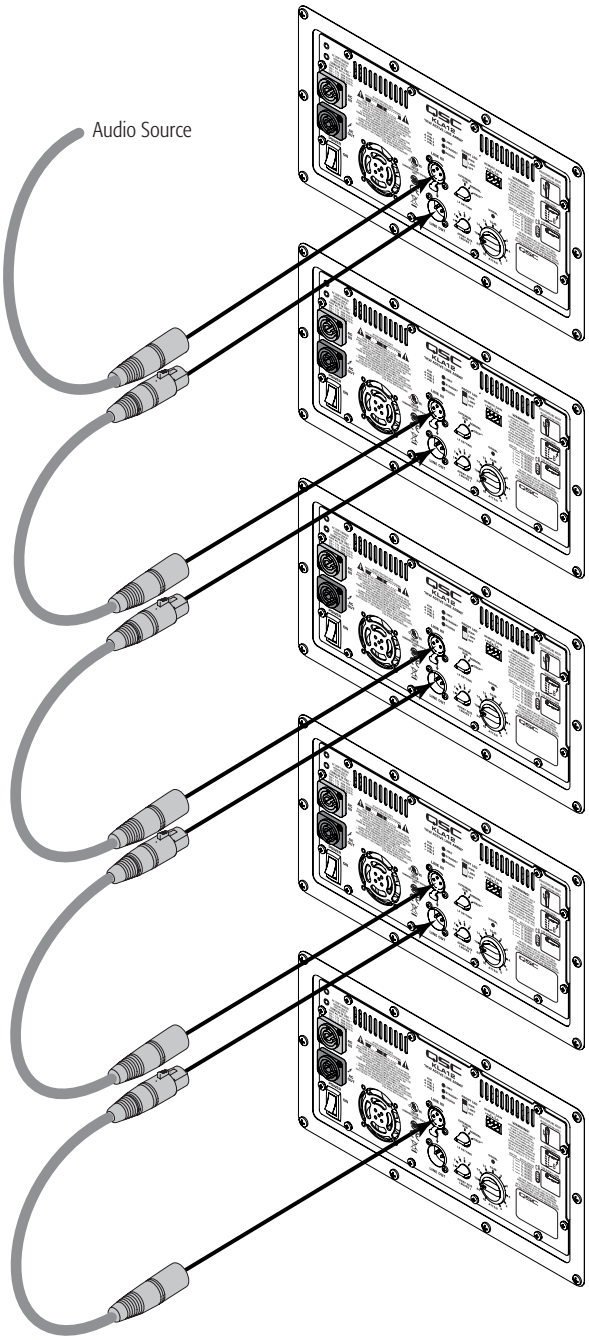



– Figure 8 –

# Connections




– Figure 9 –




– Figure 10 –

**WARNING!:** Do not connect more than five KLA Series loudspeakers together using the loop-thru power cables (four loop-thru cables, one AC power cord). If you are using loop-thru power cables, make all loop-thru connections prior to connecting to the AC mains.

**CAUTION!:** Do not restrict airflow to the rear of the speaker enclosure. Do not expose the rear panels exposed to a heat source such as direct sunlight.

# KLA12 Specifications

| | |
|---|---|
| Configuration | Multipurpose 2-way |
| Transducers | |
| Low-frequency | 12" cone transducer |
| High-frequency | 1.75" diaphragm compression driver |
| Frequency Response (-6 dB) | 49 Hz – 18 kHz |
| Frequency Range (-10 dB) | 44 Hz – 20 kHz |
| Nominal Coverage (-6 dB) | 90 x 18 degree |
| Maximum SPL (1 meter) | 131 dB |
| Amplifiers | |
| Power Output | 500 W x 500 W power module |
| Input Impedance (Ω) | XLR: 40k balanced/20k unbalanced |
| Controls | Power • Attenuation • LF Setting (External Sub/Normal/DEEP™) • Array Size (1–5) • Front LED (Pwr/Limit/Off) |
| Indicators | Limit • Standby • Power • Signal |
| Connectors | Balanced female XLR line level input • Balanced male XLR full range line level out • Remote attenuation control • Locking powerCON® power connector AC In • Locking powerCON® power connector AC Out |
| Cooling | On demand, 50 mm variable speed fan |
| Amplifier Protection | Thermal limiting • Output overcurrent • Overtemperature muting • GuardRail™ |
| Transducer Protection | Thermal limiting • Excursion limiting |
| AC Power Input | Universal power supply 100 – 240 VAC, 50 – 60 Hz |
| AC Power Consumption 1/8 Power | 100 VAC, 2.3 A • 120 VAC, 2.01 A • 230 VAC, 1.13 A |
| Enclosure | Impact resistant ABS |
| Finish | Black or White |
| Grille | Black or White powder-coated 18 gauge steel |
| Dimensions (HWD) | 15" x 23.4" x 16.6" (382 mm x 549 mm x 422 mm) |
| Weight (Net) | 55 lbs (25 kg) |
| Available Accessories | KLA12 TOTE • KLA AF12 Array Frame • K Series M10 KIT |

– Table 1 –

Mailing Address:
QSC Audio Products, LLC
1675 MacArthur Boulevard
Costa Mesa, CA 92626-1468 USA

Telephone Numbers:
Main Number: (714) 754-6175
Sales & Marketing: (714) 957-7100 or toll free (USA only) (800) 854-4079
Customer Service: (714) 957-7150 or toll free (USA only) (800) 772-2834

Facsimile Numbers:
Sales & Marketing FAX: (714) 754-6174
Customer Service FAX: (714) 754-6173

World Wide Web:
www.qscaudio.com

E-mail:
info@qscaudio.com
service@qscaudio.com
tech_support@qscaudio.com

If you would like a full copy of the KLA Series User manual, visit the QSC Audio Products website at www.qscaudio.com, or contact Customer Service +1 714 957-7150 or toll free (USA only) (800) 772-2834 to receive a copy by mail.

Si desea obtener una copia completa del manual del usuario de la serie KLA, visite el sitio web de QSC Audio Products en www.qscaudio.com, o póngase en contacto con el Servicio al Cliente al +1 714 957-7150 o sin costo (sólo en EE.UU.) al (800) 772-2834 para recibir una copia por correo.

Pour obtenir un exemplaire complet du manuel d'utilisation de la série KLA, allez sur le site Web QSC Audio Products à www.qscaudio.com ou contactez le service clientèle au +1 714 957-7150 ou au (800) 772-2834 (numéro vert - USA seulement) pour recevoir un exemplaire par courrier.

Ein vollständiges Exemplar des Benutzerhandbuchs für die KLA-Serie finden Sie auf der QSC Audio Products-Website unter www.qscaudio.com. Sie können sich unter +1 714 957-7150 oder unter der (nur in den USA) gebührenfreien Nummer +1 (800) 772-2834 auch an den Kundendienst wenden, um sich ein Exemplar zuschicken zu lassen.

如果您需要 KLA 系列产品用户手册的完整副本，请访问 QSC 音频产品网站 www.qscaudio.com，或致电客户服务部门 +1 714 957-7150，或拨打免费电话（仅限美国）(800) 772-2834 通过邮件获取副本。

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